

RF Exposure Evaluation Report

Report No.: JYTSZ-R12-2500598

Applicant: 8devices

Address of Applicant: Antakalnio st. 17, Vilnius, LT-10312, Lithuania

Equipment Under Test (EUT)

Product Name: Pineapple

Model No.: Pineapple 5, Pineapple 5-I, Pineapple 5 Mini PCIe card, Pineapple 5 M.2 A+E card, Pineapple 5-I Mini PCIe card, Pineapple 5-I M.2 A+E card.

Trade mark: N/A

FCC ID: Z9W-PIN5

Applicable standards: FCC CFR Title 47 Part 2 (§2.1091)

Date of sample receipt: 09 Apr., 2025

Date of Test: 10 Apr., to 15 Jul., 2025

Date of report issue: 15 Jul., 2025

Test Result: PASS

Project by: Viet. Z. Long

Date: 15 Jul., 2025

Project Engineer

Reviewed by: Wen. Ding

Date: 15 Jul., 2025

Senior Engineer

Approved by: Janet. Wei

Date: 15 Jul., 2025

Manager

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in above the application standard version. Test results reported herein relate only to the item(s) tested.

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1 Version

Version No.	Date	Description
00	15 Jul., 2025	Original

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3 General Information

3.1 Client Information

Applicant:	8devices
Address:	Antakalnio st. 17, Vilnius, LT-10312, Lithuania
Manufacturer/Factory:	8devices
Address:	Zirniu st. 26D, Vilnius, LT-02120, Lithuania

3.2 General Description of E.U.T.

Product Name:	Pineapple	
Model No.:	Pineapple 5, Pineapple 5-I, Pineapple 5 Mini PCIe card, Pineapple 5 M.2 A+E card, Pineapple 5-I Mini PCIe card, Pineapple 5-I M.2 A+E card.	
5G Wi-Fi Specification		
Operation Frequency:	Band 1: 5150 MHz - 5250 MHz	Band 3: 5470 MHz - 5725 MHz
	Band 2: 5250 MHz - 5350 MHz	Band 4: 5725 MHz - 5850 MHz
Modulation Technology: (IEEE 802.11a/802.11n)	OFDM-BPSK, QPSK, 16QAM, 64QAM	
Modulation Technology: (IEEE 802.11ac)	OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM	
Modulation Technology: (IEEE 802.11ax)	OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM	
Antenna Type:	External Antenna	
Antenna gain:	ANT 1~ANT 4: 5.0 dBi (declare by Applicant)	
Remark:	<p>The only difference between Pineapple 5 and Pineapple 5-I is that Pineapple 5 use QCN-9074-0 while Pineapple 5-I use QCN-9074-1. Same identical chipset, different temperature working range, -0 means it works from 0°C to 65°C, -1 means it works from -45°C to 85°C.</p> <p>Also, we, 8devices, hereby included two more devices and declare that both of the uses original Pineapple 5 and Pineapple 5-I modules on it, which are not modified or anyhow changed and are complete originals. Both devices are adapter carrier boards to make Pineapple 5 and Pineapple 5-I easy to operate.</p> <p>Adapters Model Numbers are:</p> <p>Pineapple 5 Mini PCIe card;</p> <p>Pineapple 5 M.2 A+E card.</p> <p>These two Model Numbers can be interchanged with Pineapple 5 or Pineapple 5-I and the Model Numbers changes accordingly to:</p> <p>Pineapple 5-I Mini PCIe card;</p> <p>Pineapple 5-I M.2 A+E card.</p>	

3.3 Operating Modes

Operating mode	Detail description
5G WIFI mode	Keep the EUT in continuously transmitting in 5G WIFI mode

3.4 Additions to, deviations, or exclusions from the method

No

3.5 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

● **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

● **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

● **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

3.6 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info-JYTee@lets.com, Website: <http://jyt.lets.com>

4 Technical Requirements Specification

4.1 Limits

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f ²)	6
30–300	61.4	0.163	1.0	6
300–1500			f/300	6
1500–100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ²)	30
30–300	27.5	0.073	0.2	30
300–1500			f/1500	30
1500–100,000			1.0	30

4.2 Test Procedure

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:

S = power density

P = power input to the antenna

G = numeric gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the centre of radiation of the antenna

4.3 Result

Mode	Maximum Tune-up power (dBm)	Maximum Output power (mW)	Antenna Gain (dBi)	Antenna Gain (numeric)	Distance (cm)	Result (mW/cm ²)	Limits for General Population/ Uncontrolled Exposure (mW/cm ²)	Ratio
5G Wi-Fi single ANT mode								
802.11a	25	316.23	5	3.16	20.00	0.199	1.0	0.199
5G Wi-Fi MIMO ANT mode								
802.11ax20	25	316.23	11.02	12.65	20.00	0.796	1.0	0.796

Note:

1. The Maximum Power please refer to the test report: " JYTSZ-R12-2500596 FCC 5G Wi-Fi "
2. Just the worst case mode was shown in report.

4.4 Conclusion

The device is exempt from the SAR test and satisfies RF exposure evaluation.

-----End of report-----